Under the Choko Tree
The Cookbook – Vol 2
Kitchen DIY

By Nev Sweeney

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0.0 Introduction

While Under the Choko Tree is about living sustainably and not fine dining, it is inevitable that discussions turn to food, one of our basic needs. In various areas of our website you will find information and suggestions on how to produce, preserve and cook food using sustainable techniques, and now individual recipes as well.

There are also a whole stack of foods which we buy, that are quite easily made at home, often from existing resources, but there may be a requirement to buy in a new ingredient or two and/or make or buy some new equipment. There are a number of advantages to approaching the idea of some kitchen DIY –

- Improved resilience – by taking the ability to make some of the foods we would normally buy back into our own hands, if they become unavailable, for whatever reason, we can make them ourselves.
- Ingredient control – If we make 'em, we know what goes in 'em! Once you know how to make a particular product you can ensure that only organic, sustainable, ethically sourced or home produced ingredients are used. If there are suspect ingredients or ones to which family members are allergic included in the product, they can be left out or replaced with a more acceptable substitute.
- Satisfaction – it can be remarkably satisfying to home produce food of any description and that includes the products included here. Just knowing you have the knowledge and skill to make these foods is a great thing!
- Fun – many of these processes can be fun to try for the cook, but also fun to include the family in the production process, and it is a great way to teach kids about how they are made.

It is a wonderful thing to be able to make your own foods as described here. Start with something simple and then work your way along until you feel more confident with some of the more complex processes. Include your family and give it a go!

1.0 Pasta Sauce and Tomato Processing

1.1 Our Original Process

Over the years I have made pasta sauce that, although based on tomatoes, contained a number of other ingredients such as onion, chillies, herbs, ginger even sugar, salt and vinegar. I now make it with tomatoes alone, it still last well but allows the final ingredients to be added to the sauce so it can be varied, depending on your tastes.
I was lucky enough to be able to buy a small box of Roma tomatoes from our local green grocer quite cheaply, it has not been a good year for tomatoes at our place.
I got a heavy, four litre pot and then filled it to the brim with tomatoes, and just a bit of water in the bottom to start the process off. A heavy pot is good for this type of work because it diffused the head and reduces the risk of the sauce catching. If you only have thin walled pots you can still buy a steel heat and flame diffuser from kitchen shops that will also reduce the likelihood of catching, in the old days when I was a kid they were made from asbestos.

Flame and Heat diffuser

I just covered the pot and set it to a low heat and went about other things. An hour later I checked and it was simmering nicely, I used a potato masher to push the tomatoes down and mash them up, and added more tomatoes to bring the pot back to full. After another hour I removed the lit and let is simmer uncovered for another couple of hours to concentrate the sauce.

I let it cool and then put it through a Porkert brand “fruit press” that I bought from a kitchen shop. You put the tomato mix in the top and turn the handle, the good stuff is forced through a strainer and the seeds and skins come out the front. The seeds and skins are then given to the worms.

Once strained I pack the sauce off into clean recycled glass jars with “pop top” lids, the lids being only screwed on lightly. I then stood the jars back in the pot, filled it with water and boiled the full jars for an hour or so. They could then be lifted out carefully and placed on a tea towel on the sink to cool, after tightening up the lids. When the lids pop down with a “thunk” they are properly sealed and will last at room temperature in the cupboard. Label and date and they are ready for storage or use.

Processing the sauce through the fruit press

The finished product

1.2 The Process Now (10 years on)

Every year we make a load of pasta sauce the traditional away and diced tomatoes the easy way, usually around 50 jars of each, enough to last us a year and since I wrote the original article (above), the process has changed a bit.

The Tomatoes

We just don't have the land to grow as many tomato plants as we need to keep us in passata for a year. I do make a half dozen jars from our own tomatoes when we have a good year but that is about the most I can hope for, so I buy them in. I do get them from a number of sources, mainly from a couple who grow them locally at their farm about a half hours drive away, but I have bought organic (when I have the cash) from my friend who runs the organic shop, and chemical free (not certified organic, but almost the same thing), from a farmers market about 40 minutes' drive away. I have also gone in to Flemington markets on a Saturday morning and bought directly from there. Depending on how many bottles are left over from the previous year, I usually get 50kg to 70kg of tomatoes all up, but this will be over several weekends. I can process up to 25kg at a time, more than that just gets too much.

The Pots & Jars

Over the years the size of the pots I cook up has increased, the old 4 litre pot just doesn't cut it anymore! My current go-to tomato pot is a 20 litre 'Ball' brand preserving pot, with a curved glass lid. It is the biggest pot we have, and it enables me to fit a full 16kg box of tomatoes into the one pot. Also, unlike my older 4 litre pots, it has a steel insert allowing me to use the solar

powered induction cooker when I can. If we don’t have enough sun then it is back to the gas stove.

The 'Ball' 20 litre cooking and preserving pot

The 10 litre Pot with Rack

For processing (boiling) the filled jars of tomato sauce, I have a ‘Baccarat’ brand 10 litre pot which is also able to be used on the induction cooker. While I did not buy it with one, I was able to get hold of a circular rack exactly the right size to fit in the bottom of it, to keep the jars up off the hot bottom of the pot during the boil. The 10 litre pot will accommodate 10 of the 375gm jars which we use for preserving quite comfortably. While we have used a number of different sized jars over the years, we find that with just the two of us, the 375gm jar is now ideal.

The Tomato Squeezer

For years we used the ‘fruit press’ referred to in the original article (above) and while it was lots of fun and extracted the good stuff in one pass, it was PAINFULLY slow. To process half a dozen jars did not present much problem but the number of jars we were looking at these days it just did not cut the mustard. So we looked around to see what else there was but settled on a ‘Gulliver’ brand tomato squeezer. It is a bit of a pain to clean, but it is so much faster than the fruit press, that I could whip through 5 times the jars in half the time of the old one.

So most years we use our hand powered ‘Gulliver’ but a couple of years ago we got my elder daughter a high grade electric tomato squeezer, and it makes the poor old ‘Gulliver’ look pretty sick. Again, though, it is a fair amount of work to clean up so it makes the most sense to use it for as many jars as we can manage on the day, such that we generally use it when we are getting together to prepare tomato sauce for all of the Sweeney clan.

The Process

This is pretty much the same, but here it is in more detail –

1. I wash the tomatoes as I take them out of the box, slice them in half and add them to the cooking pot. Once the pot is full I put the heat on low, so I don't burn any of the tomatoes at the start, and put on the lid, after an hour or so or when there is liquid from the tomatoes in the bottom of the pot I take the lid off and put the heat up higher.

2. At this point, the tomatoes will have packed down and I will add more if we have more to process. Once I get a good boil going I back the heat off to a simmer again. I will give the pot a mix every time I walk past it. I usually start this up between 9:00am and 10:00am, and then at this point leave things to simmer uncovered until around 3:00pm.

3. Towards the end of the simmering time I pull out the jars I intend to fill (most have been used at least once) and the lids, most of which have also been used at least once. I do buy some brand new lids every so often just to make sure I can replace any dodgy ones, but I bought a load of jars 10 years or more ago and those, along with some recycled ones, work well for us. I sterilise them either by boiling for 10 minutes or sticking them in the oven in an old baking dish at 130°C for 10 to 15 minutes. If I time it right I can pull them out just as the tomato mush is ready to process.

4. I set the 'Gulliver' up on the corner of our kitchen bench and then grab a couple of 20 litre containers we use for bulk store to place underneath the edge of the bench, this is just the right height for the output from the Gulliver to fall into a glass jug, for pouring the processed tomato sauce into the sterilised jars. On the other side of the 'Gulliver' goes a bowl to catch the waste seeds and skins.

5. I then carry the, by then 2/3 full hot tomato pot, over and place it on the bench (with a tea towel underneath it, you think I'm suicidal?) and then ladle out the cooked tomato mix into the 'Gulliver' and turn the handle. This delivers processed tomato into the jug and waste into the bowl. Once the jug is almost full I tip the waste form the bowl into the Gulliver again and process it a second time, this extracts the maximum of the goodies. I then stir the jug to distribute the concentrated tomato goodies into the rest of the sauce. When the waste goes into the bowl a second time it gets tipped into another container reserved for tomato waste, which is usually given to the worms.

6. I use the jug to fill up jars, usually about 2.5 jars per full jug (it is only 1 litre), screw on the lids and then place them into the 10 litre water bath, which is hopefully close to boiling. I redo the process until the water bath contains all 10 jars, I put the lid onto the pot and then boil the jars for an hour. Once the jars are boiled I remove them from the water bath and place them on a tea towel to cool. I then repeat the process with the second batch. One 12kg box of tomatoes produces roughly 20 completed jars.

7. The jars just sit there overnight, but depending how hot they were when they went into the water bath, the indicator button in the centre of the lids will start to 'click' into the down position (you can hear the audible 'click') within a few minutes. If they fail to do this there is a problem, probably a dud lid, so the lid will need to be replaced with a new one, and the jar re-boiled.

8. That's it, just label and store in a cool dark place until you need them.

This all sounds like a bit of work, and it is, but it is also very satisfying to look over the fruits of our labours at the end, and to be able to pull out a jar from the pantry in the middle of winter and make a pasta dish with the taste of last summer's sun in it.

1.3 Pasta Sauce Maker Road Test

Every summer for the past few years we have been buying a load of local tomatoes and spending a weekend making enough tomato pasta sauce to last the rest of the year, one or two days working making enough jars for us to have spag bol every week if we want to. The advantages to us are, local produce and reduced food miles, we know what goes in (tomatoes and nothing else), we use recycled glass jars, reduced trips to the supermarket and reduced cost.

During this time I have had the opportunity to try out three different styles of machine so I thought I would put down how I found them:

Type: "Fruit Press" manufactured by Porkert
Description: Made of tinned cast iron, this is a heavy duty unit that looks a bit like a meat mincer. The cooked tomato goes into the relatively small hopper in the top and you wind away at the drive handle which drives a screw that forces the tomato mulch against a screen (you get two screens, I use the finest) and the tomato sauce comes out the delivery chute while the waste travels along the machine and out the end.
Cost and availability: $60 about 5 years ago, bought in a specialty shop
Ease of Use: Reasonably easy, ladle the cooked tomato stuff in, turn the handle and away you go. There is a turn screw in the end where the waste comes out and it can be a bit of fun getting it set right, get it wrong and either the machine backs up and stops working or too much waste comes out and your extraction rate goes down.
Extraction rate: High, if you get the set screw setting right all you get out the end is very dry seeds and skins, all the goodies go into your preserving jars.
Speed: Slowest of the bunch, make sure you allow plenty of time especially if you have lots to do.
Versatility: This will extract the pulp of any soft fruit. I used it to make a chilli paste that nearly took the top of my head off like a Frisbee, it was immediately christened "fire starter paste". It really does concentrate the flavours.
Clean up: Reasonably easy, pull apart the machine and wash in hot water making sute to get every last bit of fruit out of the body and drive screw. Make sure it is dry before being put away or you can get rust on the bits that don't have the tin coating.

Type: 'Mouli" food mill
Description: This is the sort of thing we used to use to make baby food. It is a plastic shell with a handle that a screen fits into (you get three with the unit and again I use the finest) and a stainless steel scraper that is held onto the screen by a spring. You turn the handle and the scraper rotates, forcing the cooked tomato against the screen, pushing through the sauce and leaving the skin and seeds behind.
Cost and availability: $20 - $30 for the plastic body, more for stainless steel. I would probably go for stainless steel, it lasts longer and doesn't get discoloured by the cooked tomato the way the white plastic does.
Ease of Use: Very Easy – dump in the tomatoes and turn. When you finish there will still be some tomato sticking to the bottom of the screen, but you can scrape it off with a teaspoon pretty easily.
Extraction rate: Medium - not as good as the above fruit press but still pretty good.
Speed: Medium – speed is middle of the range.
Versatility: Very versatile, it can reduce any cooked food to mulch quite quickly.
Clean up: Easy – wash up in the kitchen sink quickly and easily.

Type: "Tomato Squeezer" Manufactured by Gulliver
Description: This one is a somewhat larger machine with a hopper that sits on top of a rotating drum, as the drum rotates two spring loaded vanes force the tomato sauce through a screen (one size of screen only) and spits the skins and seeds onto a chute out the back of the machine, the tomato sauce is delivered down another chute at the front. It is made out of stainless still and feels a bit "tinny" but seems to do the job OK.
Cost and availability: Around $55 from a specialist cooking supply shop.
Ease of Use: Very easy, just slop in the cooked tomato to be processed and turn the handle.
Extraction rate: Not as good as the others, some tomato sauce is spat out with the skins and seeds, but the extraction rate can be improved by putting the waste skins and seeds back through the machine.

Speed: Verrry fast. If you have a lot to do this is the machine for you. A side benefit of the speed is that if you pack off and process the tomato sauce quickly, you lose less heat and so the boiler comes up to temperature more quickly, and you save on fuel.
Versatility: Not very. This is designed for processing tomatoes and that is it.
Clean up: A bit more hassle, being larger it takes a bit of hassling around to get it in the sink and there are some nooks and crannies that the tomato mulch can get caught up in which take time to clean out.

1.4 Tomato Processing the Easy Way

In summer here at the choko farm we take advantage of the availability of tomatoes, home grown ones but also some bought in from local farms. I have mentioned above how we make our yearly supply of tomato pasta sauce about now and I have just finished off this year's batches. I bought in a load of tomatoes and found that there were some left over, but not enough to start another batch of sauce. Coincidentally Linda has been campaigning for bottled diced tomatoes as well as the sauce so I have processed some diced bottles, and this is how I did it.

Packing the jars

The process is incredibly simple. I grabbed a large glass bowl, cut the part where the tomato attaches to the bush out and then diced the tomatoes into the bowl. Those of you out there who are real cooks should probably look away now! The easiest way I came up with for dicing the tomatoes was to cut the tomato lengthways then crossways almost all the way through, the sliced the through the tomatoes from the side so that they collapsed into roughly one centimetre cubes.

Setting up to boil

With the tomatoes cored and diced I got hold of my preserving jars, I just use recycled glass jars with pop-top lids. Using my newly acquired stainless steel jam funnel I ladled the cubes into the jars up to about one centimetre from the top. I used the cylindrical handle of a wooden spoon to pack the diced tomatoes in as tightly as I could to push out air bubbles. A light sprinkling of citric acid on top ensures that the pH is low enough to prevent botulism, then top the jar up with a bit of water or tomato juice.

With the lids applied they can now go into the waterbath for processing. I placed the jars so they are not touching the bottom or each other. I was lucky enough to pick up a 25cm wire round cake cooling stand which fits the bottom of the pot I use as a waterbath pretty well and that keeps the jars of the bottom of the pot, fill to just below the lids with cold water. I put the pot on the flame and applied the heat and kept an eye on the temperature such that it took an hour or so to rise from cold to boiling. My jars were only 375ml so I kept them in the boiling water for 30 minutes but if you were using large jars (say over 2 litres) I would leave them boiling for another 10 or 15 minutes to make sure the heat penetrates fully.

Ready to Go!

Once the allotted time was passed I pulled them out and placed them on a wooden cutting board to cool and made sure the lids were tight. As the jars cool the pop top lids pop down with a loud click, letting you know they are properly sealed! Once cooled I labelled them with the contents and especially the date. If you do this on a regular basis it can be very handy to know when an individual jar was processed, so that you use the oldest ones first. There you have it! Tomato wastage averted and a happy wife, and as we all know happy wife = happy life!

2.0 Making Hard Sweets

Okay, I make no claims for this stuff being healthy or not rotting your teeth or being able to cure scurvy. These are good, old fashioned boiled sweets and when you (or more likely your kids) have had more sunflower seeds, unsweetened carob and dried fruit than they can handle and are screaming for some rubbish……this will do it for you!

The recipe that I am going to tell you about is cheap, requires only one piece of specialized kit (maybe), is very versatile, easy to make (even for the compleat idiot such as myself) and all of the gear is storable. So you can stock it away and when, one rainy day, the kids are driving you crazy you can drag it all out and yell “lets make lollies!”. Always a guaranteed winner.

If you are good with such things, you can extract your own essential oils and flavours, and or colours and make this a bit healthier than it is, but the recipe as it is, is based on evil artificial colours and flavours, although less processed alternatives are available these days. To make these sweets you will need –

Ingredients
White sugar
Liquid glucose (known as corn syrup in the USA)
Water
Colours
Flavours

I can buy all of the above in our local woollies, but if you have a specialty craft or cooking shop near you, or even a health food store, you can get most of the stuff from them. The colours and flavours are available in 25 ml bottles, cost peanuts and last for ages as each batch only needs a few drops of each, so you can afford to get a range to expand your sweet making options.

For each batch of lollies the measures are –

Sugar (white granulated)	2 cups
Liquid glucose	½ cup
Water	½ cup
Colour	2 - 4 drops
Flavour	1-2 teaspoons.

Method

Place the sugar, liquid glucose and water into a pan and heat it up to melt in the ingredients. Bring the mixture to the boil, which will initially be about 110ºC but over about 15 minutes this will rise to about 150ºC, at which time remove it from the heat and stir in the colour and flavour. This is where the specialized kit comes into it, to know the temperature you need a sweet thermometer, but if you are a cook (as opposed to someone who mucks around with food – like me!) you will know how to tell without using one. The mixture will pass through a number of stages (soft ball, hard ball etc.) the last one, and the one we are interested in is the hard crack stage. This is where if a small amount is put into water, it goes hard and can be……..well, cracked. Otherwise, I reckon a sweet thermometer is a good investment!

Once your mixture is up to the right stage, pour it onto a greased (or non-stick) tray and let it run out to 3 to 6mm thick, and cool a bit. The edges will cool quickest and before they go hard lift an edge up and cut it into 25mm x 25mm (for example) squares using scissors (this works – trust me). Keep them separated until cool otherwise you wind up with one huge lolly! Once cool store them in an airtight jar, dusted with icing sugar, again to avoid them picking up moisture and resulting in that huge lolly thing again!

Now if you want to have some fun, and enjoy screwing with people's minds (like I do!) you can make batches that do not make sense by mixing up colours and flavours. For example make orange coloured lollies with a lime flavour or green ones with a strawberry flavour, red ones that taste like lemon……..I think you get the idea. We have been conditioned since childhood to expect that certain colours go with certain flavours, and when the expectation is not met, you get some interesting responses. Try it on your family and friends – it's fun!

As promised, you can do interesting stuff with the basic mixture eg, pour round dollops onto a greased or non-stick pan and press in a stick – bingo – lollypops; or make two batches of different colours and draw them out, twist them together and cut them off to form two tone lollies. You can use the mixture to coat apples, add a stick and get toffee apples. As you can see the mixture is versatile and I'm sure that once you get into it more ideas will come to you.

If you want to extend the range of yummies you can make, get in some popcorn (unpopped), sweetened condensed milk, cooking chocolate, desiccated coconut and what-the-hell maybe some of those sunflower seeds and dried fruit (I won't tell if you don't). If you make your own it will be cheaper, you will KNOW what rubbish has gone into them, and it's fun.

For reference, any self-respecting cookery book will have a section on confectionary, so have a trawl through your bookshelves or get yourself down to your local opportunity shop, second hand bookshop or any fine book retailer. Bloody hell now I'm sounding like an ad……..just get into it!

3.0 Soy Products

3.1 Making Soy Milk

As a high protein food source that you don't have to hunt, catch, kill, gut, butcher, clean or do generally unpleasant things to before you can eat it, soy beans have fascinated me for a long time. The problem is that they don't taste all that crash hot by themselves and you generally have to spend some time and effort to disguise the taste. Hence after having tried a few things that were generally regarded as unacceptable by the family, I let the idea rest. However, we are lovers of Asian food and I have done some reading over the years about how to go about it another way, processing the soy beans into an entirely new form of food – that bland white stuff called variously tofu Doufu or bean curd, depending on where you come from. The process is interesting and, dare I say it, fun to carry out and you get high protein munchies at the end of it. What could be better?

Well alright, lots of things but if you are interested in living more sustainably and/or self-sufficiently it is worth while trying the process out to see if homemade tofu is for you. There are a number of steps to the process and at each step the result is edible in its own right so you get exposure to all sorts of oriental goodies, although some are more acceptable to my western palate that others. The two basic steps are turning soy beans into soy milk then turning the soy milk into tofu. This article concerns itself with the first process, a second article will be written about completing the tofu production process.

First grow or buy you soy beans. Seeing as Australia produces large amounts of soy beans they are neither expensive nor hard to find, being available in most supermarkets, or health food shops if you want the organically grown variety. I use the supermarket variety and find them OK. I have tried to grow my own but I must admit to not much success thus far. Look for beans labelled as organic to avoid using genetically modified (GM) product.

1 cup of soy beans rehydrated Vs Dried

The dried beans that you buy look like small yellow ball bearings and are about as appetising. They need to be rehydrated so the first step is to soak them overnight in plenty of water, they expand quite a bit so allow plenty of room in the container. The following process is based on starting with one cup of dried beans.
Once the beans have absorbed the water and gained their more bean-like appearance, they must be ground up so that the milk can be extracted. The traditional Japanese way to do it is to use a stone grain grinder, but I imagine that a Moulinex style hand food processor would work just as well. I use a blender – so much for tradition!

Soy beans in blender prior to whizzing

All you do is dump in the rehydrated beans, add two cups of water and blend until you get a fine white sludge. This sludge looks and smells like a soy bean flavoured smoothie and I can tell you it tastes as good as it sounds. In Japanese it is called go and may be fried up with garlic and onion in a bit of butter and salt and pepper to make a party dip, put into soups or scrambled eggs, used in bread mixes or even made into vegetarian patties with breadcrumbs and diced vegetables then deep fried. So even if for some reason you get stuck at this stage it is not a total loss.

A soy bean smoothie!

Assuming you want to go on to the next stage, boil six cups of water in a large pot, say about four litre capacity then pour in the soy bean thickshake and stir over a moderate heat until the froth starts to rise. Then is starts to rise if fills the pot very quickly, so keep stirring and reduce the heat to low and simmer for 10 minutes. The cooking of soy products is very important because there is a substance in the soy bean called a trypsin inhibitor which funnily enough, inhibits trypsin, and enzyme essential for the digestion of protein. This substance is deactivated by cooking so to get the full value out of your soy bean products they must be cooked – but enough of the theory!

Simmering soy bean sludge Batman!

Now that you have simmered your soy sludge, you need to filter out the gritty bits of ground up soy bean. The way i do it is to put an old (but clean) pillowcase into a large colander or strainer and then put the whole assembly over a (roughly two litre) pot. Pour in the sludge. The soy milk flows through and the soy grits (called okara in Japanese) are left in the cloth. To get most of the soy milk out it is traditional to use a press, but not having one I fold the pillowcase over and twist it around to squeeze out the milk. The problem is

that the stuff is still damn HOT, so wear a pair of thick rubber gloves and have some cold water on hand to take the sting out. Then pour another two cups of water over the okara and squeeze it out again to get the maximum amount of milk out. Make sure the cloth you use is well washed beforehand, first time I tried this trick I got soy milk full of blue fluff.

Soy bean sludge and pillowcase in the colander

You know have two products – soy milk and okara. The soy milk can be consumed as is, converted into tofu right away or put in the fridge for later. In a closed container it will last a week or more in the fridge. The okara looks like breadcrumbs and according to the books has a "subtle" flavour which to my gross western palate translates as "bland". I must admit the first time I tried it I didn't think much of it, but the taste and texture (very nutty) tends to grow on you over time. If after giving it a chance you still don't think much of it, it makes a high protein poultry food that our chooks love.

Fine Okara grits

Assuming you don't want to use it as just chook food, what else is it good for? It can be incorporated into vegetable soups, used as a thickener in onion, mushroom or curry sauces (when ground finely – whizz for a bit longer in the blender!) put into scrambled eggs or bound with eggs, made into patties and fried – nice but a bit gritty. It can also be made into balls with garlic, onion, ginger and bound with corn flour, then deep fried and dipped in sweet and sour sauce. When added to flour products such as bread, pancakes or muffins it increases their protein content and adds nuttiness to the texture. So you see that it can be a versatile food in itself and being a by-product of the process it is virtually free, so don't let the chooks have all the fun!

The Finished Product!!!!!

3.2 Turning Soy Milk into Tofu

The process of turning soy milk into tofu is similar to turning cow's milk into cheese, but a different type of coagulator is used. The coagulators used for making tofu are various calcium and magnesium salts, the two most readily available being calcium sulphate (plaster of Paris or gypsum) and magnesium sulphate (Epsom salts). The traditional coagulator which achieves the finest flavour and texture is Nigari, which is a mixture of calcium and magnesium salts extracted from the sea. I would like to digress here for a moment because the way they obtain Nigari is fascinating!

Many years ago when my interest in a more sustainable/self-sufficient lifestyle was just starting I was reading about making salt from seawater. The book said that the easiest way was to boil up the sea water until salt crystals were left in the bottom of the container, but this method left impurities in the salt referred to as the "bittern salts" which gave the sea salt a (predictably enough) bitter flavour. This was where the book left it, with no hints on how to extract the bittern salts to get decent tasting salt, so I filed that information away in the back of my mind and carried on.

Sometime after that I was reading up about tofu and found the process for making nigari. First make sea salt by the boil down method then put the salt crystals into a hessian bag and suspend it over a trough or pot in a humid atmosphere, like by the sea somewhere! The nigari is exceptionally water soluble and it absorbs moisture from the air to the point where it becomes liquid, dripping into the vessel placed underneath the bag of salt. The water can be boiled off giving nigari crystals. So there you have it, the Japanese not only worked out a way to extract the impurities from their salt but found out an important use for the impurity, amazing!

You can start the process off as soon as you have extracted the soy milk, or you can put the soy milk in the fridge and do it up to a week later. I find that the soy milk will keep for up to 10 days in the fridge. If you are using fridged soy milk you will need to reheat it to simmer for five minutes, removing it from the heat once this is accomplished.

Reheating to simmer

To coagulate the soy milk resulting from our one cup of dry soy beans add half a teaspoon of dry coagulant (nigari or Epsom salts) dissolved into half a cup of water. The plaster of Paris is not water soluble, but a similar amount will need to be slurried with water before addition to the soy milk. Pour the liquid coagulant over the top of the hot soy milk, one third of the volume at a time and mix it gently though the soy milk, then cover and let stand for 10 to 15 minutes to finish coagulating.

Curds and whey in the pot

What you wind up with is a soft white curd floating in a yellowish whey. The next step is to filter the curds and press them into tofu. You can retain the whey and use it in bread making of as soup stock. To filter out the curds I press my faithful and long suffering pillowcase into service again and use it to line a white Tupperware strainer (I'm sure that 80% of the Australian population have one tucked away in a cupboard somewhere.) I then pour the curds and whey thought the pillowcase/strainer assembly (any decent size strainer or colander will do the trick really) and let the whey drip through. If i am feeling particularly frugal I will catch it and use it in cooking but most times it winds up down the sink.

Pouring curds and whey into the colander

The whey drains out leaving the

Saucer and cans in place - pressing the tofu

One point on the coagulator. I realise that Epsom salts do have other medicinal uses and have been used in the past to free up sluggish bowels, but the amount used here is very small and I think most of it remains in the water phase (the whey). In any case, I have not suffered any ill effects from using it.

What you do next depends on how firm you like your tofu – I like mine firm so it holds together when I stir or deep fry it. What I do is fold the pillowcase over the top of the tofu and place a small plate or saucer on top, then place an 800gm and a 425 gram tin on top of the saucer to act as weights to press the tofu. I leave that there overnight and the result is very firm tofu. The next morning you just remove the weights and the saucer,

unfold the pillowcase and there it is. Wash off any fluffy bits of pillowcase left behind and put the tofu in a container covered with water and store it in the fridge until you want to use it. It will last a week or two if you change the water every few days.

Pure white, tasty tofu

Now that you have made your tofu you can stir fry it with veggies, noodles, meaty bits or whatever and marinated in your favourite sauce or the sauce added after it is cooked. It can be deep fried until it is golden brown, then eaten by itself or added to other dishes. It can be added to Japanese or Chinese style soups or used as an ingredient in a Chinese firepot dinner. It can even be cut into slabs and put on the barbeque to make Aussie style tofu, which might shake up your guests a bit, or even convert them over to a new taste. Tofu, because of its subtle (or dare I use that word again – bland) flavour and its ability to take on the flavours of other foods it is very versatile. I recommend scanning the Asian cookbooks in your local library and copying down any promising recipes.

So you can see that to make tofu is not all that complicated and is certainly no more work than pasta making or baking your own bread. It is a lot of fun and you get a nutritious foodstuff at the end. Tofu can be an important source of protein, particularly if you follow a vegetarian or vegan lifestyle. It is also high in calcium. Or it can just be a change, something new and tasty to add to the family's diet.

4.0 DIY Pasta

4.0 Our Process

Pasta! Easy to make, versatile and tastes great! So why not make it yourself?

If you have your own chooks and eggs you already have half your ingredients and if you can grow your own wheat then you can have completely home produced pasta. I tried home grown wheat years ago but didn't get much of a harvest so I use unbleached organic flour sourced from Demeter Farm mills, but we do use our own chook eggs so we are getting there.

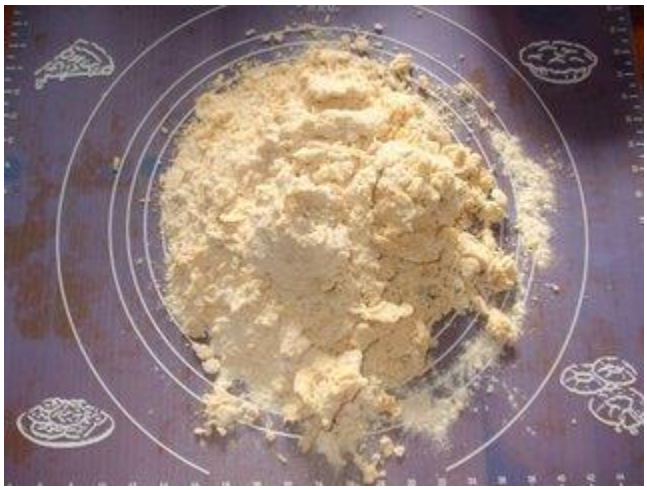
OK, I do cheat, I use a pasta machine. Strictly speaking it is not necessary, you can roll pasta dough out with a rolling pin and then roll it into a.....well.....roll, of pasta then cut off lengths and unroll them, cook them and eat them. But I find that the pasta machine makes it easier and more fun, so that I am more likely to do it

.

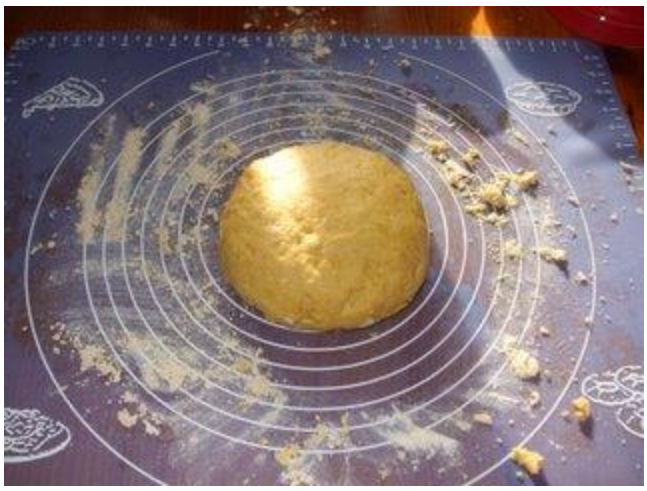
Making the Dough

1. Measure out 500gms of flour, we use a mix of organic 50% wholemeal, 50% unbleached white flour, into a bowl, make a well in the centre and then crack in 6 eggs (if you are going to all the trouble of making pasta and don't have any chooks yourself, at least use free range eggs).

2. Mix the eggs into the flour with your fingers. The wholemeal can make for a stiff dough so you may wish to add in a bit of water or olive oil if you are having difficulty working it.



3. Turn the flour/egg mess (oops that should read mix) out onto a floured surface; marble slab, wooden table or plastic kneading sheet and knead the mix until the texture and that lovely golden egg pasta colour are uniform throughout the ball of dough.



4. Wrap the ball of dough in a tea towel and let it rest for half an hour. If you want to take a break at this stage don't leave it too long. I once made up the dough, made some pasta then covered the rest in plastic wrap and put it in the fridge meaning to come back to it later. Within a day or two it had turned a disgusting grey/brown colour, it may have still been OK to use but no-one here was interested in yecch coloured pasta!

5. The cut the dough into roughly 1cm thick slices and run it through the pasta machine with the rollers on their widest settings, lightly flour it, double it over and run it through again, repeating until the dough is smooth.

6. Reduce the thickness of the dough by passing it through the machine, reducing the distance between the rollers each time, until you have the dough as thick as you want it.

Making the Pasta

Now you have the dough right where you want it you can make into homemade pasta. If you want lasagne, all you have to do is cut the sheets to size so that they will fit in your lasagne dish, the pasta will expand when cooked so cut it a bit small. Because the lasagne noodles are uncooked you will need to boil them for 10 to 12 minutes before assembling your lasagne.

If you want to make spaghetti or fettuccine, your machine should have come with rotary cutters to allow you to make either if these favourites. The big hint is to flour the dough sheets well before cutting otherwise the fresh, sticky pasta will stick to the machine, the cutters and itself driving you berserk and ensuring that this is you one and only experience with homemade pasta. Flouring the dough sheet will also make it easier to separate the strings of pasta. Either cook them immediately or set them out to dry. They can be hung over a broom handle or equivalent supported on a couple of chairs or even a clothes airer. You can buy specific pasta drying gadgets, but why bother?

Filled pastas like ravioli or cannelloni take a bit more effort and there are other attachments for your pasta machine to make it “easier”. Personally, having tried the ravioli maker, sorting out two sheets of pasta going into the machine and keeping it topped up with filling and then getting the ravioli out the bottom and stopping them sticking together. I should have had the doctor up my medication first because it really did push the envelope on frustration. The ultimate came when I finally made a sheet of good looking ravioli and put it down on the bench seat near the table I was working on to dry off a bit, when my eldest came in to see how I was going and promptly sat on it. It is best to draw a curtain over the resulting hullabaloo. There must be a simpler way!

And there is! For a few dollars you can buy a wheel that is sort of like a pizza cutter but it cuts a zigzag line. To make ravioli easily place one sheet of pasta on a hard, clean surface, place on small lumps of filling on a grid pattern and then lay your second sheet over the top. Use the zigzag roller to cut between the lumps of filling and it seals as well as cutting. Stress free ravioli!

The zigzag ravioli cutting wheel

The zigzag wheel can also be used to cut out different shapes of pasta (as can a pizza cutter) to give you a bit of variety, but any way you cook it, homemade pasta is a great way of using up those excess home grown eggs and making a great feed at the same time.

This is what it's all about - home made pasta and home grown veggies!

4.1 DIY Pasta – An Alternative Experience by Kevin Mechelmans

Ingredients
600g flour
6 large eggs

Method
Place the flour on a board or in a bowl. Make a well in the centre and crack the eggs into it. Beat the eggs with a fork until smooth. Using the tips of your fingers, mix the eggs with the flour, incorporating a little at a time, until everything is combined. Knead the pieces of dough together – with a bit of work and some love and attention they'll all bind together to give you one big, smooth lump of dough!

Preparing the dough

You can also make your dough in a food processor if you've got one. Just bung everything in, whiz until the flour looks like breadcrumbs, then tip the mixture on to your work surface and bring the dough together into one lump, using your hands.

Once you've made your dough you need to knead and work it with your hands to develop the gluten in the flour, otherwise your pasta will be flabby and soft when you cook it, instead of springy and al dente.

Finished Dough

There’s no secret to kneading. You just have to bash the dough about a bit with your hands, squashing it into the table, reshaping it, pulling it, stretching it, squashing it again. It’s quite hard work, and after a few minutes it’s easy to see why the average Italian grandmother has arms like a wrestler! You’ll know when to stop – it’s when your pasta starts to feel smooth and silky instead of rough and floury. Then all you need to do is wrap it in cling wrap and put it in the fridge to rest for at least half an hour before you use it. Make sure the cling wrap covers it well or it will dry out and go crusty round the edges (this will give you crusty lumps through your pasta when you roll it out, and nobody likes crusty lumps!).

How to roll your pasta

First of all, if you haven't got a pasta machine it's not the end of the world! All the mammas I met while travelling round Italy rolled pasta with their trusty rolling pins and they wouldn't even consider having a pasta machine in the house! When it comes to rolling, the main problem you'll have is getting the pasta thin enough to work with. It's quite difficult to get a big lump of dough rolled out in one piece, and you need a very long rolling pin to do the job properly. The way around this is to roll lots of small pieces of pasta rather than a few big ones. You'll be rolling your pasta into a more circular shape than the long rectangular shapes you'll get from a machine, but use your head and you'll be all right!

If using a machine to roll your pasta, make sure it's clamped firmly to a clean work surface before you start (use the longest available work surface you have). If your surface is cluttered with bits of paper, the kettle, the bread bin, the kids' homework and stuff like that, shift all this out of the way for the time being. It won't take a minute, and starting with a clear space to work in will make things much easier, I promise.

Dust your work surface with some flour, take a lump of pasta dough the size of a large orange and press it out flat with your fingertips. Set the pasta machine at its widest setting - and roll the lump of pasta dough through it. Lightly dust the pasta with flour if it sticks at all. Click the machine down a setting and roll the pasta dough through again. Fold the pasta in half, click the pasta machine back up to the widest setting and roll the dough through again.

Repeat this process five or six times. It might seem like you're getting nowhere, but in fact you're working the dough, and once you've folded it and fed it through the rollers a few times, you'll feel the difference. It'll be smooth as silk and this means you're making wicked pasta!

Now it's time to roll the dough out properly, working it through all the settings on the machine, from the widest down to around the narrowest. Lightly dust both sides of the pasta with a little flour every time you run it through. When you've got down to the narrowest setting, to give yourself a tidy sheet of pasta, fold the pasta in half lengthways, then in half again, then in half again once more until you've got a square-ish piece of dough. Turn it 90 degrees and feed it through the machine at the widest setting. As you roll it down through the settings for the last time, you should end up with a lovely rectangular silky sheet of dough with straight sides - just like a real pro!

If your dough is a little cracked at the edges, fold it in half just once, click the machine back two settings and feed it through again. That should sort things out. Whether you're rolling by hand or by machine you'll need to know when to stop. If you're making pasta like tagliatelle, lasagne or stracchi you'll need to roll the pasta down to between the thickness of a beer coaster and a playing card; if you're making a stuffed pasta like ravioli or tortellini, you'll need to roll it down slightly thinner or to the point where you can clearly see your hand or lines of newsprint through it.



Making Ravioli

Once you've rolled your pasta the way you want it, you need to shape or cut it straight away. Pasta dries much quicker than you think so whatever recipe you're doing, don't leave it more than a minute or two before cutting or shaping it. You can cover it with a damp clean tea towel which will stop it from drying.

5.0 Home Vinegar Making

5.1 Making the Factory

One of the skills that we have pretty well lost is the art of home vinegar making. If you look up the old texts the way they generally tell you to do it is to get hold of an old wine barrel, turn it on its side and then drill plenty of holes in the top half, to let the air in. Fill the bottom half with wine of some description and wait. The problem is that you really, REALLY must like your vinegar because this will make a lifetime supply in one go. I wanted to be able to experiment with different types of vinegar and make small amounts for my own use, plus where was I going to put a bloody big wine barrel so that it would remain undisturbed for weeks at a time? There had to be a way that the old folks used to make their vinegar on a small scale without all this rigmarole.

One night I was leafing through some old Grass Roots magazines from my library when I came across an article by a bloke who had developed a small scale process based around Fowlers Vacola bottling jars and a wooden box. I have taken and developed his ideas and this article is the result. But first (don't you hate it?) a bit of theory –

Vinegar is an organic acid that is formed when ethanol or ethyl alcohol (ie the stuff you drink) becomes oxidised. When an unpreserved alcohol beverage is left open to the atmosphere organisms will make their home in the alcohol and gradually turn the alcohol to acetic acid and thus the beverage into vinegar. Most alcohol beverages that are produced commercially contain sulphites which are designed expressly to prevent this wondrous transformation occurring, after all most people don't like taking a swig of wine only to wind up with a mouthful of vinegar.

The Box

Top of box showing divider and jars in place

The system I had originally read about was based on No36 Vacola bottling jars which have a volume of about a litre but when I checked my stock of such things I found that I didn't have any no36s but I did have a number of No75 Vacola jars which have a volume of about two litres. This seemingly irrelevant fact is actually significant because the size of the bottles will determine the size of the box and Vacola No75 bottles have a maximum diameter of 125mm so that will be the minimum internal dimensions for each compartment of the box that I was about to construct.

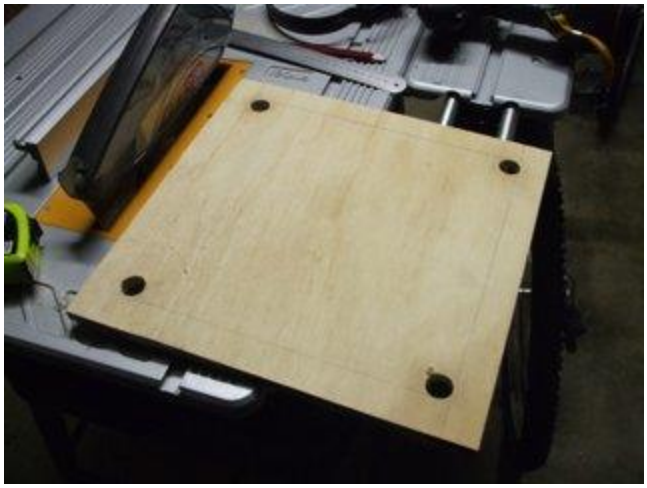
I was able to find some 12mm thick x 240mm wide pine boards left over from other projects to make the sides and internal dividers, and some 12mm thick plywood for the top and the

base. The front and back are 362mm long (x 240 x 12) and the sides are 320mm long (x 240 x 12) as are the internal dividers. It was fairly easy to make the edge lap joint for the internal divider by cutting a slot in the centre of each divider board the same thickness as the board and to half the width of the board so that both dividers fit together to form an "X".

The Box - from the front before fitting the lid

I drilled and screwed the edges of the main boards to form a box, then drilled and screwed the plywood bottom on to provide some rigidity, then assembled the edge lap joint and slid the X into place inside the box and drilled and screwed it into place to lock it in and provide the box more rigidity. Now for the lid!

One thing that you need to make vinegar is for the wine and the bugs to have access to atmospheric oxygen so that the alcohol can be oxidised to the acid (in this case from ethanol to acetic acid) so a solid top is not what was needed. I drilled four 12mm holes in the corners of the 12mm plywood I was going to use for the lid so that I could use my jig saw to cut out the centre of the lid leaving a 30mm wide surround with nice rounded internal corners.



The lid - holes drilled ready to cut out the centre

To keep out vinegar flies and other nasties but leave the tops open to the air I cut out some fly screen mesh to the same size as the lid and then place it on top of the lid. I found some timber off cuts in amongst my pile of "I can't throw that out it'll come in useful one day" and cut out 4 20mm x 30mm battens, 2 x 360mm long and 2 x 300mm long. I set them on the top of the lid to hold the fly screen mesh on and then drilled, countersunk and screwed them in place from underneath so that the fixing screws did not show. Almost finished!

During the acetification or vinegar making process it is quite possible there could be some acid fumes evaporate so I got hold of some decent sized brass hinges (and, OK, they looked pretty good too). I also got hold of and fitted a brass hasp and staple to keep it closed just in case I needed to, you never know when the cats might wake up one night crazy for vinegar and there goes all my hard work down the drain (or down the cat as the case may be).

The Vinegar Factory complete and in service
So the box is now complete and ready for phase 2 is to set up the factory to actually produce vinegar – see below.

5.2 Making the Vinegar

I have made vinegar! Unfortunately, wish as I might, that is not true, it is the collection of bacteria and cellulose that is "mother of vinegar" (*mycoderma aceti*) that has made it for me. How can you get hold of this mother of vinegar I hear you ask? Well to my mind there seems to be three ways –

- Buy some – A less than satisfying solution because this is about doing things for yourself, but perhaps the quickest and easiest option if it is available to you. Here in Aus the suppliers seem to pretty few and far between. At least I was not able to locate one.
- Buy some unpasteurised vinegar – better, but not perfect. I did go down this route and it worked well for me, more of that later. Residual mother of vinegar will in commercial vinegars cause them to go cloudy so they are mostly pasteurised and/or preserved chemically to prevent it re-forming. Thankfully there are still some health food shops and even producers who will sell at least cider vinegar in its unadulterated/untreated form.
- Start from scratch – Not very technical and it does take some time, but by fermenting your own alcoholic beverage and then leaving it uncovered and untreated, with access to the air those wonderful bacteria will find YOU! Although even this approach is not without its problems.

So how difficult was it? Mmmm, reasonably!

My idea of having four compartments in my vinegar factory is that they would each contain a different type of vinegar: one for cider, one for white wine, one for red wine, and one for.... cleaning vinegar. You know the stuff they talk about in the natural cleaning books that show you how to clean your house with 3 or 4 natural products. Well one of them is invariably white vinegar, so how cool would it be to make your own?

Anyway, that was the theory and I suppose we should discuss how each one went down –

Cider Vinegar

This one was perhaps the easiest. Get hold of some of that "live" cider vinegar from your local health food shop or wherever. It doesn't matter whether it is organic, biodynamic or what, it just has to be unpasteurised and unpreserved so if you see any numbers in the small print ingredients, in all probability it is preserved and won't work. I trawled extensively through our usual supermarkets and didn't find one that would work. The key is that they will usually tell you on the bottle that it still contains some mother-of-vinegar and not to worry if it goes a bit cloudy, that will be a selling point.

Cider Vinegar showing mother-of-vinegar

Anyway, once you have your cider vinegar grab your glass vinegar making jar and then add the contents of your vinegar bottle to it. Now top it up with an equal volume of HARD cider, remember that the reaction is between the mother-of-vinegar and alcohol so non-alcoholic apple cider won't work. It seems to work better if you de-gas your cider before adding it to the vinegar. Mix well and apply some old pantyhose or stocking material over the mouth of the jar held in place by a rubber band to act as a last defence against the bugs you don't want.

Place the jar of vinegar/cider into your factory, shut the lid and leave it undisturbed. Over the next few weeks a thin translucent white layer should form on top of the liquid like a raft but if it is solid white, gray and/or fuzzy it may be mould and you will need to start again. You need to leave the factory as undisturbed as possible because the raft on top of the liquid can sink if the jar is knocked, say by your significant other doing the vacuuming or if one of the kids decides to "investigate". If this happens the production of vinegar from alcohol will stop because the raft is no longer in contact with the oxygen in the air, but given time another mother-of-vinegar raft will form so not all is lost.

The end of the process is a bit difficult to gauge but the best advice I can give you is to sniff your cider regularly and when it smells vinegary enough, you're there. Of course this is not the end of the process and I assume you will want to keep it going so pour out your vinegar into a holding container of some description, glass or stainless steel would be best and discard the mother-of-vinegar, preferably in the compost. Clean out your vinegar factory jar and give it a wash in really hot water and allow it to cool, then replace half of your vinegar batch in the factory jar and top up half and half with new hard cider, replace your pantyhose over the mouth of the jar (not on your legs) and put the jar back in your factory box to start again. Put the harvested vinegar into a nice bottle with a lid that seals and label it. If going cloudy doesn't bother you leave it as it is otherwise you might want to try pasteurising your vinegar by heating it to a temperature of 66°C and holding for 30 minutes to keeping clear and bright.

White Wine Vinegar

While not being drinkers, we do seem to have accumulated an alarming number of alcoholic beverages (no you can't have any, get your own!) as prizes, gifts etc and I swapped a couple of likely bottles of good plonk to my daughter for a cask of moderately priced white wine. It was, as with all wine except the stuff you make yourself, preserved with a sulphur based reducing agent designed to prevent oxidation, so I half-filled the factory jar with the wine, then threw in some commercial white wine vinegar (also preserved) and left it open to the air. The theory was that the oxygen in the air would eventually react with the preservative and remove it from circulation. Nothing was happening after a month or so, I "seeded" the wine/vinegar mix with 5mls or so of the cider vinegar which by that time was starting to develop a very nice mother –of-vinegar raft on it.

That's one thick mother, of vinegar

The weather was still cold, we were just coming out of winter, so it took a while for anything to happen, but happen it did! Over time a very thick mother-of-vinegar formed, not the 2-3mm thick one on the cider vinegar, this was 30mm thick! Although it did seem to be doing its job and there was a definite strengthening of the vinegar odour. After the initial round of vinegar making I poured off the vinegar, removed the mother-of-vinegar, poured the vinegar back into the jar and added an equal quantity of white wine. Again it has produced a mother-of-vinegar 30mm thick so I don't know what is going on there.

Red Wine Vinegar

Not a happy making story this one. I poured some red wine into the factory jar and left it open to the air, and again nothing happened so I inoculated it with 5mls of the cider vinegar and it seemed to form a very thin mother-of-vinegar raft. So I removed the raft and topped up with an equal amount of new red wine and so far.....it has done nothing! The mother has not seemed to have its usual effect and more research is needed.

Cleaning Vinegar

Another terrific idea! Well sort of. To create the alcohol is easy, just dissolve some sugar in water, throw in some yeast and away you go. That's what I did in the last factory jar, the idea being that the fermentation would proceed and there being no preservatives involved, the bugs would find the alcoholic solution and proceed to do their thing. Well it kind of worked but I got the wrong sort of bugs. When the yeast goes in the material carrying the yeast makes the solution cloudy, I suspect it is a flour type material, and I think it was this

that resulted in furry grey layer of mould that formed instead of the mother-of-vinegar. More work is required here and I think the trick is to make the alcohol in a fermenter as you would normally; filter out any extraneous crap, then put the filtered solution into the vinegar factory.

Sugar, water and yeast fermenting and somewhat cloudy

So if you set it up right you can have your own vinegar factory, albeit on a small scale, and produce all sorts of vinegar for yourself. I used to know one lady who would make mulberry vinegar so almost anything is possible and if at some stage you want to go into it big time – find yourself a wine barrel!

6.0 DIY Applesauce the Natural Sweetener

Why on earth would you want to make your own apple sauce? After some consideration there are a number of reasons why you might want give it a go –

- If you have access to them, you can use local apples and reduce food miles; if you have your own apples, so much the better.
- You can make it very energy efficiently by using the techniques in this article.
- You can make it to YOUR taste, exactly the way you like it.
- If made using local apples in season you can save money, particularly if you go through quite a bit.
- You know exactly what goes in because you control exactly what goes in.
- Apple sauce is handy to have around as a healthy alternative to sugar as a sweetener.
- It is ridiculously easy and fun to do.....well I had fun doing it anyway (and I suppose that says something about me....)

Have I converted you yet? If the answer is “yes” read on, but if not I’m sure you’ll find something else on this site to interest you so please, have a wander! Anyway, for those of you still with me, this is how we did it.....
We are lucky enough to have an apple producing area within an hour or so drive from our place so we set off to see what they had on offer. It seems that apple sauce benefits from having different types of apples blended together to construct it and as a result we picked up 4 kg of Pink Lady apples and 2kg of Gala apples. The pink lady’s were particularly sweet so guaranteed good flavour and the total cost was less than $3 per kilo of apples, bargain!

I know these look like mini spring rolls but they are apple cores!
To maximise fuel efficiency we used our 8 litre pressure cooker to cook the apples so that there was no need to boil the living daylights out them for hours and hours to mulch them down. The process was a very simple one; we cored the apples and then fed the cores to the chooks, although I must admit I am unsure if even coring them was necessary, then cut them in quarters. It is important for even cooking, especially for the short times required by pressure cookers, to cut the apples into roughly the same size pieces. Then I tossed them in to the pressure cooker with about 20mm of water in the

bottom. When making apple sauce in the pressure cooker the apples can foam up and clag the steam vent so don't pack them above the "maximum" line on your pressure cooker. If there is no "maximum" line allow at least 50mm freeboard just to be sure.

Our Pressure Cooker

Once there are enough apples in the pressure cooker seal it up and place it on high heat to get it cooking quickly, but once the temperature is reached and you get some steam blowing off turn the heat down to minimum and start your cooking timer. The apples will only take four minutes to cook so keep an eye on them and once the timer goes off, remove them from the heat and allow the pressure cooker to cool down naturally to the point where the contents is still hot, but not under pressure.

Processing the Apples

While all this is going on you can sterilise your jars by boiling them up or putting them in the oven at 100°C for a while, then remove them and line them up ready to fill. To remove the skin and any residual bits of core I passed the resulting apple mulch through a rotary food mill, with the output neatly filling a 3 litre glass bowl. To the three litres of apple sauce we put in half a cup of our own freshly squeezed lemon juice, this added a bit of tang as well as more acid to help with preserving the sauce. With the apples we had it took two full runs of the pressure cooker and we still had a few eating apples left over.

Three litres of Apple Sauce!

All that was required then was to ladle the sauce into the pre-warmed jars, a wide mouth jam funnel makes this easier, wipe the top of the jar and threads put the lids on loosely and process in a boiling water bath for an hour, remove from the water, tighten up the lids and let them cool. You should only use pop-top lids so that you know when they pull a vacuum (and suck down

with a POP!). If any of the lids don't suck down try removing and wiping the inside of the lid and then reprocess as before or just put them in the fridge and use immediately. Alternatively you could place the apple sauce in a plastic, freezer safe container and freeze it.

The Finished Product

Store them in a cool, dark, dry area and you should get 2-3 years from them. The apple sauce is a great natural sweetener; on porridge for breakfast, roast pork sandwiches for lunch or on ice cream after tea for dessert, I've also heard it can be substituted as part of the fat when baking, so get cooking!